

**AMENDMENTS TO THE CLAIMS**

1. (Currently Amended) An apparatus for estimating a manufacturing cost for a product comprising:

a first input device for receiving input data concerning physical characteristics of the product to be manufactured at multiple stages of design;

a cost calculation processor ~~for calculating~~ adapted to calculate the manufacturing cost based on information received inputted from said first input device for one or more process series, and to calculate the manufacturing cost factor data which is independently initially supplied and is updated by from an at least two external suppliers using a second separate input device devices; and

a memory for storing each of the calculated manufacturing costs; and

a display device for simultaneously displaying the calculated manufacturing costs at the multiple stages of design for the at least two external suppliers, so that a user can determine which of the at least two external suppliers is better at each of the multiple stages of design-cost from said cost calculation processor;

~~wherein said cost calculation processor calculates a plurality of alternative manufacturing costs, with each of the alternative manufacturing costs being associated with a respective one of a plurality of alternative process~~

~~series for manufacturing the product, the plurality of process series being entered via said first input device; and~~

~~wherein said display device simultaneously displays at least two of the plurality of calculated manufacturing costs for the plurality of process series so that the at least two of the plurality of calculated manufacturing costs can be compared.~~

2. (Currently Amended) The apparatus according to claim 1, wherein said cost calculation processor is ~~arranged~~ adapted to calculate manufacturing costs for individual process steps of the plurality of process series; and wherein said display device displays the calculated manufacturing costs for the individual process steps.

3. (Original) The apparatus according to claim 2, wherein said physical characteristics include at least one of a shape, a thickness, and a material composition of the product to be manufactured.

4. (Currently Amended) The apparatus according to claim 3, ~~wherein said external supplier comprises~~ further comprising:

a variable cost memory; and

a fixed cost memory.

5. (Original) The apparatus according to claim 4, wherein said variable cost memory and said fixed cost memory are connected to said cost calculation processor via an in-house net connection.

6. (Original) The apparatus according to claim 4, wherein said variable cost memory and said fixed cost memory are connected to said cost calculation processor via an internet connection.

7. (Currently Amended) The apparatus according to claim 4, wherein said first input device is located in an in-house development department.

8. (Currently Amended) The apparatus according to claim 7, wherein said external ~~supplier receives~~ suppliers receive data from in-house production facilities and outsourced component makers.

9. (Currently Amended) The apparatus according to claim 8, wherein said in-house production facilities are connected to said external ~~supplier~~ suppliers via an in-house net connection, and wherein said outsourced component makers are connected to said external ~~supplier~~ suppliers via an internet connection.

10-14. (Cancelled)

15. (Currently Amended) The apparatus according to claim 1, wherein said external ~~supplier receives~~ suppliers receive data from in-house production facilities and outsourced component makers.

16. (Currently Amended) The apparatus according to claim 15, wherein said in-house production facilities are connected to said external ~~supplier~~ suppliers via an in-house net connection, and wherein said outsourced component makers are connected to said external ~~supplier~~ suppliers via an internet connection.

17-20. (Cancelled)

21. (Currently Amended) An apparatus for estimating a manufacturing cost for a product comprising:

a first input device and an associated first display device for receiving and viewing input data concerning physical characteristics of the product to be manufactured at multiple stages of design of the product;

a cost calculation processor for calculating the manufacturing cost based on information ~~inputted~~ received from said first input device at each stage of design of the product, and cost factor data independently supplied from ~~an~~ at

least two external supplier-suppliers using a second separate input device devices;

said first display device for displaying the calculated manufacturing costs from said cost calculation processor,

wherein, upon entering a plurality of alternative process series for manufacturing the product at each of the multiple design stages via said first input device, said cost calculation processor calculates a plurality of alternative manufacturing costs for the at least two external suppliers, with each of the alternative manufacturing costs being associated with a respective one of the plurality of alternative process series for manufacturing the product at each of the multiple design stages,

~~wherein the first display device simultaneously displaying the calculated manufacturing costs at the multiple stages of design for the at least two external suppliers, so that a user can determine which of the at least two external suppliers is better at each of the multiple stages of design simultaneously displays at least two of said plurality of calculated manufacturing costs so that the at least two of the plurality of calculated manufacturing costs can be compared,~~

wherein ~~at least one of the~~ calculated manufacturing costs displayed on said first display device change based on either the cost factor data independently supplied from the external supplier using the second input

device, ~~or~~ and alternative physical characteristics of the product to be manufactured inputted using the first input device.

22. (Previously Presented) The apparatus according to claim 1, wherein the cost calculation processor includes:

a manufacturing cost price calculator for calculating manufacturing cost price elements based on cost prices received from a manufacturing cost price data base and data presented by an display information processor and an input information processor;

a variable cost element calculator for calculating variable cost elements based on variable cost factors received from a variable cost database and data processed by the input information processor; and

a cost calculation processor for adding manufacturing cost price elements calculated by the manufacturing cost price element calculator and variable cost elements calculated by the variable cost element calculator into a cost total.

23. (Currently Amended) The apparatus according to claim 1, the manufacturing costs are compared based on differences between the process series including a series of different processing processes, and also differences between the process series including a series of single processing processes.